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11 February 2013

Ms. Jill McKenzie
Bureau of Case Management
State of New Jersey Department of Environmental Protection
P.O. Box 424
Trenton, New Jersey 08625-0424

Subject: Former Ingersoll Rand Facility Confirmatory Vapor Intrusion Sampling

Dear Ms. McKenzie:

Geosyntec Consultants, Inc. (Geosyntec), on behalf of Ingersoll Rand Company (IR), has prepared this letter to report the findings of the confirmatory vapor intrusion (VI) sampling program conducted at the former Ingersoll Rand Facility located in Phillipsburg, Warren County, New Jersey (the Site). This work was performed in accordance with the vapor intrusion work plan (VIWP) that was submitted to the New Jersey Department of Environmental Protection (NJDEP) for the previous vapor intrusion investigation conducted in June 2012, the memorandum dated 21 December 2012 (Response to NJDEP comments), and in various emails between the Parties dated January 16 and 17, 2013.

Low concentrations of volatile organic compounds (VOCs), namely cis-1,2-dichloroethene (cis-DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC) have been detected in groundwater samples from monitoring wells located on the Site. NJDEP Technical Requirements for Site Remediation (TRSR, &:26E-1.15)) requires that a receptor evaluation of the vapor intrusion pathway be performed to assess potential health risks. In June 2012, Geosyntec performed a VI investigation at the Site, collecting indoor air (IA) and sub-slab soil gas samples from four onsite buildings, as described in the May 2012 VIWP. Each of these buildings was selected based on the critical distance criteria presented in the Vapor Intrusion Technical Guidance (VITG), Section 2.4.3.

Results from the June investigation provided evidence of a vapor concern in one of the buildings (Building #7, currently occupied by Curtiss Wright Corporation) related to elevated concentrations of both TCE and PCE in soil gas and indoor air. A vapor concern response action

form was submitted to NJDEP on July 16th, 2012. A Vapor Intrusion Investigation Report summarizing the findings of the entire investigation was submitted to NJDEP in August of 2012. In this report Geosyntec concluded that a potential vapor concern existed in Building 7 related to TCE and PCE, and that the data collected at the other three buildings did not indicate a completed VI pathway. Geosyntec proposed to collect confirmatory IA samples during the heating season (Nov. 1 through March 31) to confirm the results of the initial study. Geosyntec received a response email with preliminary comments concerning the August 2012 Report from NJDEP on 27 November 2012. In the response email, NJDEP requested that Geosyntec move forward with the confirmatory sampling of Building 7, and include a more extensive network of indoor air sampling, primarily the inclusion of office space. Several other comments were addressed with regards to the investigation report, as well as the concern that an exceedance of methylene chloride in the indoor air in Building 13 was not attributable to an indoor air source (as concluded by Geosyntec), and was a potential vapor concern. Each of these comments was addressed by Geosyntec in a response letter dated 21 December 2012. In addition, the vapor intrusion issues at the Site were discussed in a meeting with the case team at NJDEP on 11 January 2013.

Confirmatory indoor air sampling of Building 7 was conducted by Geosyntec on 22 and 23 January 2013. Analytical data was received from Alpha Analytical on 28 January 2013 and a Geosyntec internal data validation review was completed on 29 January 2013. This letter presents a summary of the January 2013 confirmatory sampling and a discussion of all data collected at the Site to this time.

1 DESCRIPTION OF SAMPLING METHODS

Field activities associated with the confirmatory sampling began with a review of the previous indoor air building survey for Building 7, completed June 4th, 2012. This survey was compared to existing building conditions, to ensure no new potential sources of VOCs in the building were present. Sampling locations were then selected, and the indoor air and ambient air samples were collected between 22 and 23 January 2013. Procedures and methods utilized during the VI investigation were consistent with the guidelines presented in the VITG. A summary of the sampling methods is presented in the following subsections.

1.1 Pre-Sampling Building Survey

A review of the previous indoor air building survey (attached as Appendix A) revealed that building conditions remained unchanged since the June 2012 investigation, and no new potential indoor air VOC sources were present in the building. A summary of the results of the indoor air survey are presented below.

- Building 7 is utilized by Curtiss Wright for the development and testing of pump assemblies with limited areas used for office space.
- The building footprint encompasses approximately 70,000 square feet.
- Chemicals used within the facility include commercially purchased cleaners, resin solutions, epoxy adhesive solutions as well as acetone.
- There are two separately identified breathing zones within the building, the office spaces, and the main production area with an attached “lean-to” area. The entire building is heated with forced hot air, while central air conditioning is only present in the office spaces.
- The main production area was observed to be a large open space, approximately three stories tall with overhead cranes that can traverse the length of the building.
- Overall slab integrity was observed to be good condition, with no noticeable cracks or holes.

1.2 Sample Locations and Rationale

Indoor air sampling was completed between 22 and 23 January 2013. As shown on Figure 1, a total of five indoor air samples were collected along with one duplicate and one ambient air sample. A photo log depicting sampling locations is also presented as Appendix B. As detailed in the Conceptual Site Model (CSM) presented in the Geosyntec Response to NJDEP Comments Letter, 21 December 2012, impacted soils nearest the northeast end of the building (near the former transformer pad) present a potential source for vapor intrusion in the building. Therefore, several samples were biased towards this location. The following is a summary of the rationale for the selection of each sample location.

- IA-01/DUP-01 were placed in the office space located at the northwest portion of the building. This sample was chosen to represent a breathing zone separate from the main facility airspace, and to identify any potential vapor concerns that might be present in the occupied offices of the building.

- IA-02 was placed in the “lean-to” area located at the northeast portion of the building nearest the former transformer pad where VOC-impacted soil was identified in 2005. As detailed in the CSM, this area has been identified as a potential source for vapor intrusion in the building. This sample is anticipated to represent a “worst-case” scenario for the building.
- IA-03 was placed in the “lean-to” just south of IA-02. This sample correlates with the June 2012 sampling location (VI-7) and was chosen to confirm the previous investigation’s data.
- IA-04 was placed in the main facility area directly west of the pump testing pit, which was identified during the indoor air building survey. This sampling location was chosen to represent the air quality in the main facility workspace. This location is near the suspected source area (nearest IA-02). It is important to note that the “lean-to” area where samples IA-02 and IA-03 were collected, shares airspace with the main facility workspace.
- IA-05 was placed in the second office space located at the southwest portion of the building. Similar to IA-01, this sample was chosen to represent a breathing zone separate from the main facility airspace, and to identify any potential vapor concerns that might be present in the offices of the building.
- OA-01 was placed in the courtyard directly east of the building. This sample was used to characterize ambient “background” concentrations at the site.

1.3 Indoor Air Samples

As detailed in the VITG (Section 3.5), all indoor air samples were collected within the breathing zone at a height of approximately 4 feet above grade using batch certified 6L Summa™ canisters with 5-µm filters. Indoor air samples were collected using flow controllers calibrated to collect 24-hr time integrated samples. One duplicate sample was collected and co-located with IA-01.

1.4 Ambient Air Samples

To characterize ambient (background) concentrations, one outdoor air sample was collected during the sampling event. The ambient air sample was collected in the central courtyard area located directly east of the building (Figure 1). The sample was placed at a height of about 4 feet above the ground surface in order to collect a representative sample of the outdoor breathing

zone air. The ambient air sample was calibrated to collect a sample over a 24-hour period consistent with indoor air samples.

1.5 Laboratory Analysis of Soil Gas, and Ambient and Indoor Air Samples

All indoor and ambient air samples were analyzed by Alpha Analytical Laboratories, Inc. (Alpha) of Mansfield, Massachusetts. Alpha is certified by NJDEP for the analysis of air samples by Method TO-15. As per the VITG (Sections 3.3.1.3 and 3.5.3), all samples were analyzed by EPA Method TO-15 for the VOCs on the NJDEP TO-15 analyte list plus TICs. Results are reported by Alpha as both ppbv and $\mu\text{g}/\text{m}^3$. The laboratory has provided an Electronic Data Deliverable (EDD) reporting package format that meets NJDEP requirements.

2 DATA VALIDATION

The data submitted by Alpha Analytical meets the quality assurance requirements specified in the NJDEP VITG, including collection methodologies and analysis by a NJDEP certified laboratory using NJDEP-recommended laboratory methods, analyte lists and reporting limits.

Geosyntec performed a formal data validation review of the laboratory analytical data by reviewing chain-of-custody forms, sample holding times, analytical quantitation limits, field QA/QC samples, MS/MSD analyses, and laboratory QA/QC results (method blanks, surrogates and laboratory control samples). The validation review concluded that these analytical data are representative, of known and acceptable accuracy and precision, and suitable for use in addressing the investigation objectives of this work. The data validation review was completed on 29 January 2013. A copy of the full laboratory data package may be found in Appendix C.

A summary of the data validation results are listed below:

- Field duplicate relative percent difference (RPDs) were greater than 30% for acetone, methylene chloride, 2-butanone, n-hexane, benzene, n-heptane, and toluene between the parent and duplicate sample. These data were qualified with a J flag (to indicate an estimated value).
- All method blanks, surrogates and laboratory control samples were found to be within quality control limits.

- All analyses were performed as requested on the chain-of-custody (COC).
- Samples were analyzed within holding times.

3 CONFIRMATORY SAMPLING ANALYTICAL RESULTS

The laboratory analytical results for the indoor air and ambient air samples are presented in Table 1 and Figure 1. The results of the indoor and ambient air have been compared to the NJDEP Non-Residential Indoor Air Screening Levels (NRIASLs) which were released by NJDEP on January 16, 2013. The results from each sampling location are summarized in the following subsections.

3.1 Sampling Location IA-01

A total of nine compounds were detected above the reporting limit (RL) in indoor air sample IA-01. The site-specific compounds of concern, Tetrachloroethene (PCE) and Trichloroethene (TCE), were detected at a concentration of $4.22 \mu\text{g}/\text{m}^3$ and $1.39 \mu\text{g}/\text{m}^3$, respectively, below the VISL of $47 \mu\text{g}/\text{m}^3$ and $3 \mu\text{g}/\text{m}^3$. There were no compounds found in exceedance of the NRIASLs.

3.2 Sampling Location IA-02

A total of 16 compounds were detected above the RL in indoor air sample IA-02. PCE and TCE were detected at a concentration of $26.1 \mu\text{g}/\text{m}^3$ and $6.23 \mu\text{g}/\text{m}^3$, respectively. Of the compounds identified, one was found in exceedance of the NRIASLs, TCE ($6.23 \mu\text{g}/\text{m}^3$ compared to a screening level of $3 \mu\text{g}/\text{m}^3$). The concentration of TCE measured was below the Rapid Action Level of $18 \mu\text{g}/\text{m}^3$.

3.3 Sampling Location IA-03

A total of 17 compounds were detected above the RL in indoor air sample IA-03. PCE and TCE were detected at a concentration of $16.4 \mu\text{g}/\text{m}^3$ and $2.77 \mu\text{g}/\text{m}^3$, respectively. There were no compounds found in exceedance of the NRIASLs.

3.4 Sampling Location IA-04

A total of 16 compounds were detected above the MDL in indoor air sample IA-04. PCE and TCE were detected at a concentration of $9.43 \mu\text{g}/\text{m}^3$ and $1.75 \mu\text{g}/\text{m}^3$, respectively. There were no compounds found in exceedance of the NRIASLs.

3.5 Sampling Location IA-05

A total of 13 compounds were detected above the MDL in indoor air sample IA-05. PCE was detected at a concentration of $3.19 \mu\text{g}/\text{m}^3$. None of these compounds were found in exceedance of the NRIASLs

3.6 Ambient Air Sample OA-01

A total of six compounds were detected above the MDL in ambient air sample OA-01. None of these compounds were found in exceedance of the NRIASLs

4 JUNE 2012 RESULTS COMPARED TO 2013 VISLS

The June 2012 VI investigation results for the Site have been compared to the January 2013 Vapor Intrusion Screening Levels (VISL), and are presented in Tables 2 and 3. A site layout is presented as Figure 2 to help reference each building. Below is a summary of changes in exceedances for both sub-slab and indoor air:

- Compared to the January 2013 VISL, the Building 7 indoor air sample (IA-7) no longer has a concentration that exceeds the NRIASL for PCE ($18.7 \mu\text{m}^3$ compared to $47 \mu\text{m}^3$); TCE still remains in exceedance ($5.8 \mu\text{m}^3$ compared to a screening level of $3 \mu\text{m}^3$).
- The Building 13 sub-slab soil gas sample (SSP-13) no longer has an exceedance for PCE ($113 \mu\text{m}^3$) compared to a screening level of $2,400 \mu\text{m}^3$); therefore, no compounds were found in sub-slab soil gas in exceedance of the NRSGSLs.
- The Building 13 indoor air sample (IA-13) no longer has an exceedance for methylene chloride ($479 \mu\text{m}^3$ compared to a screening level of $1,200 \mu\text{m}^3$); however, an exceedance for ethylbenzene now exists ($18.7 \mu\text{m}^3$ compared to a screening level of $5 \mu\text{m}^3$).

5 CONCLUSIONS

The following conclusions are presented in two sections; a discussion of the changes in sub-slab and indoor air exceedances following the release of 2013 VISL, and a specific discussion of the confirmatory sampling conducted at Building 7.

5.1 Comparison of 2012 Data to the 2013 VISL

5.1.1 Building 12

No sub-slab soil gas exceedances were reported for Building 12 in the August 2012 VI Investigation Report; therefore it was not necessary to collect an additional indoor air sample. A comparison of the results from the June 2012 sampling to the 2013 screening levels showed no concentrations in exceedance of the soil gas VISLs; therefore, no completed VI pathway exists in Building 12.

5.1.2 Building 13

Comparison of Building 13 sub-slab soil gas data to the 2013 screening levels indicates that PCE no longer exceeds the NRSGSLs. Under the new VISLs, indoor air would not require analysis; however, during the June 2012 investigation indoor air sample IA-13 was collected and analyzed. PCE was not detected in this sample (IA-13), and the only exceedance of the 2007 NRIASLs was methylene chloride ($479 \mu\text{m}^3$). Using the 2013 NRIASLs ($1,200 \mu\text{g}/\text{m}^3$), methylene chloride is no longer in exceedance. The concentration of ethylbenzene, however, exceeds the 2013 VISL ($18.7 \mu\text{m}^3$ compared to a screening level of $5 \mu\text{m}^3$), where it had been below the 2007 IASL. Ethylbenzene was detected in the sub-slab soil gas sample for Building 13, but was not found in exceedance of the NRSGSLs. This concentration was reported as $16.7 \mu\text{m}^3$, a value which is of the same order of magnitude as that found in the indoor air. Using a multiple lines of evidence approach, ethylbenzene has (1) not been considered a contaminant of concern (COC) in the groundwater or soils near Building 13; (2) shows no attenuation factor between measured concentrations in indoor air and subslab soil gas; and (3) is one of several constituents of gasoline that were identified in the indoor air sample. Therefore, it can be concluded that no completed vapor intrusion pathway exists in Building 13.

5.1.3 Building 16

Results for Building 16 remain unchanged when compared to the 2013 screening levels. Two compounds were found in exceedance of the NRSGSLs, with PCE at ten times its respective screening level. However, no compounds were detected above the NRIASLs in the indoor air sample collected. Based on the data, no completed VI pathway exists at Building 16.

5.1.4 Building 7

Under the 2013 VI Screening Levels, TCE and PCE are both in exceedance of the NRSGSLs by an order of magnitude. The concentration of PCE measured in the indoor air of Building 7 during the June 2012 investigation does not exceed the 2013 NRIASL. TCE remains in exceedance of the NRIASLs ($5.8 \mu\text{g}/\text{m}^3$ compared to a screening level of $3 \mu\text{g}/\text{m}^3$).

5.2 January 2013 Sampling for Building 7

Conclusions based on the analysis of samples collected in January 2013 sampling of Building 7 are as follow:

- The concentration of TCE in one sample in the building exceeds the NRIASL, but is less than the Rapid Action Level, and therefore is a vapor concern. This sample was collected in the “lean-to” structure connected to the east end of the building nearest the former transformer pad where impacted soils were detected in 2005.
- The portion of Building 7 described as the “lean-to” can be regarded as a structure as is defined in the VITG, section 2.3.2. The space is occupied on a limited basis by individuals utilizing the space and exposure is limited. Several water pump valves are located in this area and when specific pump tests are conducted, workers enter the area to operate the valves. The total residence time for an individual worker in this section of the building varies from approximately 30 minutes to 1 hour daily during operating phases. When pump tests are not in operation, this part of the building could remain unoccupied for several weeks at a time. Access is limited by a locked door. A picture of this area is included in Appendix B.
- The “lean-to” structure of the building has a partial shared breathing zone with the main facility. This structure is connected to the rest of building by one wall, partially open to the rest of the building through wall gaps (2-3 feet in diameter) designed to allow pump lines to enter. Indoor air results from the main facility and adjoining office spaces provide evidence that no vapor concern is present beyond the limits of the “lean-to.”

- Ongoing remedial efforts are planned to occur at the Site which may include the removal of identified impacted soils (nearest IA-02). This action would be considered a source removal and eliminate the potential source area in this part of the building.

6 FUTURE ACTIONS

Geosyntec proposes the following future actions with regards to the vapor intrusion investigation at the Site:

- No further action for Buildings 12 and 13.
 - Sub-slab soil gas results for both buildings indicate no exceedances of the current SGSLs (2013). In addition, an indoor air exceedance was only noted in Building 13, which corresponded to ethylbenzene, a compound unrelated to site COCs.
- The establishment of a Long-Term Monitoring (LTM) program for Buildings 7 and 16 in accordance with Section 6.5.2 of the VITG.
 - The vapor concern identified in Building 7 can be considered exclusive to the “lean-to” structure located at the east end of the building. By defining the “lean-to” as a structure based on the limited exposure it provides to building occupants, and by using signs to mark the area as limited access, no further mitigation should be necessary to close the Vapor Concern. A plan for LTM on the area will be prepared.
 - Sub-slab soil gas results from Building 16 identified PCE at ten times its respective NRSGSL. Although indoor air data showed no exceedances of the NRIASLs, the VITG recommends LTM as an appropriate action in instances where soil gas contains compounds of concern at the concentrations measured.

Upon approval from the NJDEP for the actions proposed above, Geosyntec plans to submit a LTM plan for Buildings 7 and 16. The plan will follow the guidance provided in section 6.5.2 of the VITG. Geosyntec will continue to monitor the indoor air of each of the buildings until Site cleanup efforts have resulted in the remediation of the suspected VI source.

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We look forward to discussing the results and conclusions of this investigation with you.

Sincerely,

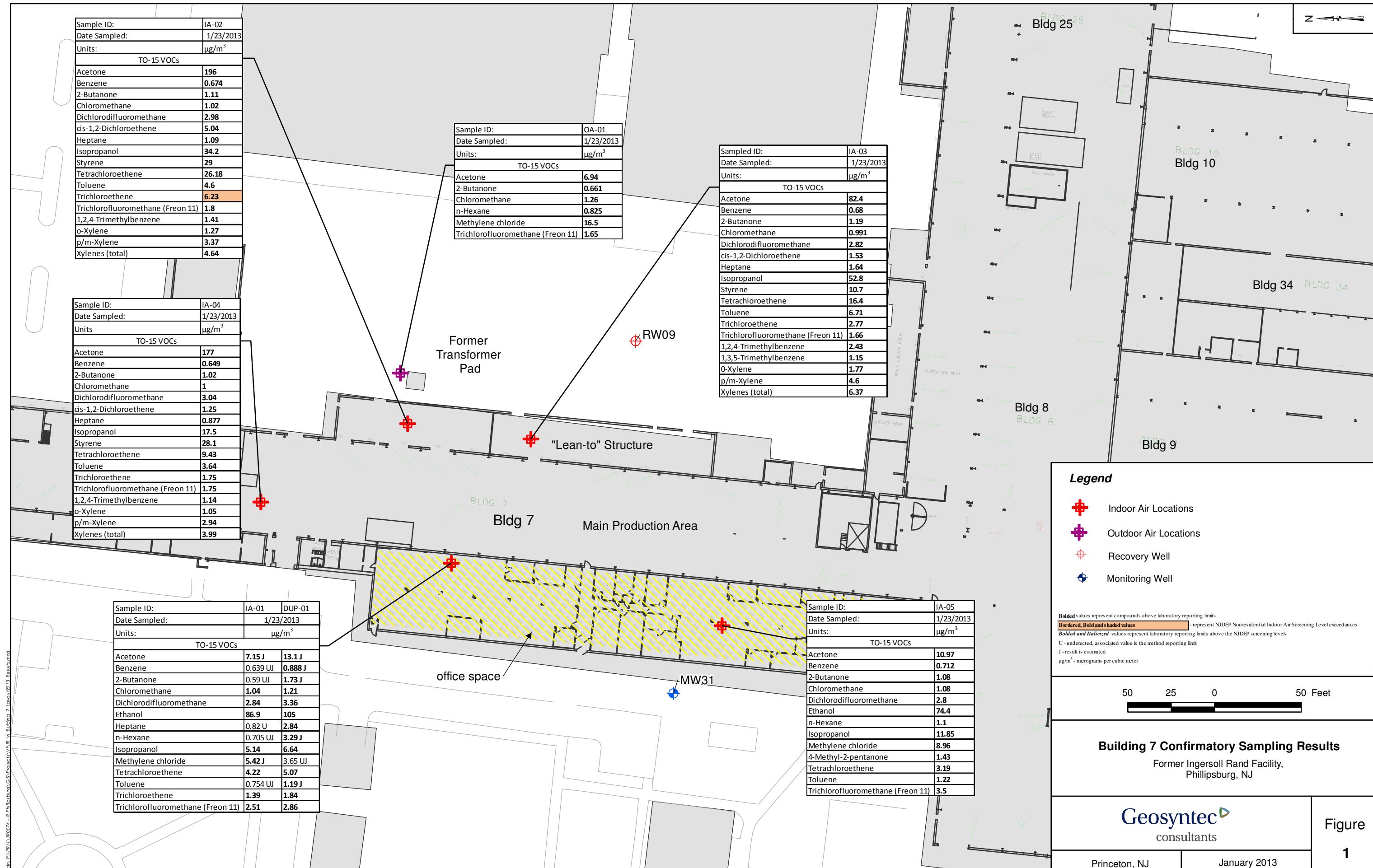


Scott R. Drew, L.S.R.P.
Associate

cc/

Dawn Horst, Ingersoll Rand Company

Enclosures: Figure 1: Confirmatory Sampling Results
 Figure 2: Site Layout
 Table 1: Confirmatory Sampling Results
 Table 2: June 2012 Sub-Slab Analytical Results
 Table 3: June 2012 Indoor Air Analytical Results
 Appendix A: Building 7 Indoor Air Survey
 Appendix B: Photo Log
 Appendix C: Full Data Report



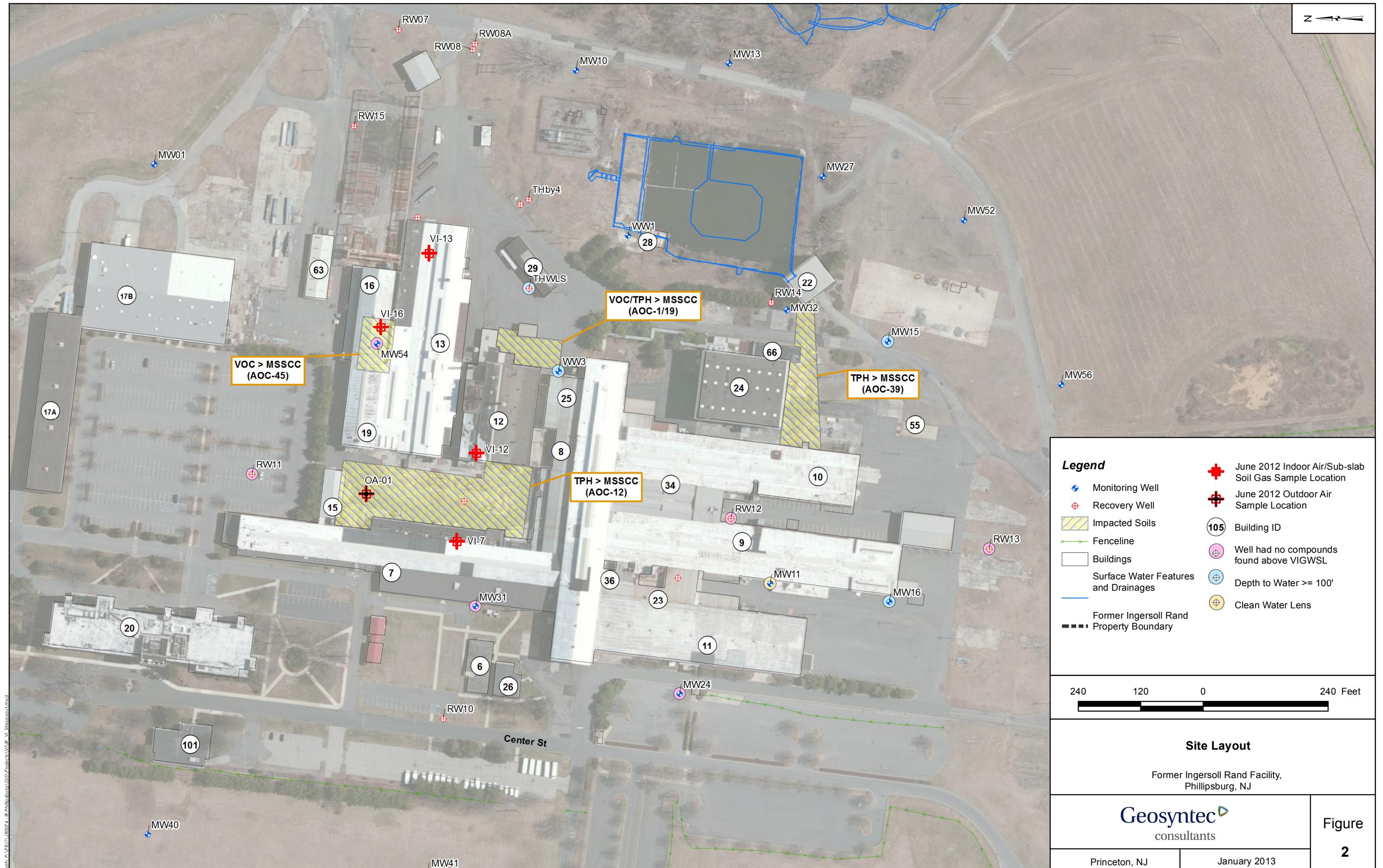


TABLE 1
CONFIRMATORY INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, NJ

Location ID:	NJDEP Nonresidential Indoor Air Screening Levels	Curtiss Wright Building (#7)							
		IA-01 1/23/2013	DUP-01 1/23/2013	IA-02 1/23/2013	IA-03 1/23/2013	IA-04 1/23/2013	IA-05 1/23/2013	OA-01 1/23/2013	
TO-15 Volatile Organic Compounds (µg/m³)									
Acetone	140,000	7.15 J	13.1 J	196	82.4	177	10.97	6.94	
Benzene	2	0.639 UJ	0.888 J	0.674	0.68	0.649	0.712	0.639 U	
Bromodichloromethane	3	1.34 U	1.4 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	
Bromoform	11	2.07 U	2.16 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	
Bromomethane	22	0.777 U	0.812 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	
1,3-Butadiene	1	0.442 U	0.462 U	0.442 U	0.442 U	0.422 U	0.442 U	0.442 U	
2-Butanone	22,000	0.59 UJ	1.73 J	1.11	1.19	1.02	1.08	0.661	
Carbon disulfide	3,100	0.623 U	0.651 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U
Carbon tetrachloride	3	1.26 U	1.31 U	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U
Chlorobenzene	220	0.921 U	0.963 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U
Chloroethane	44,000	0.528 U	0.552 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U
Chloroform	2	0.977 U	1.02 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U
Chloromethane	390	1.04	1.21	1.02	0.991	1	1.08	1.26	
3-Chloropropene	2	0.626 U	0.654 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U
2-Chlorotoluene	NS	1.04 U	1.08 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U
Cyclohexane	26,000	0.688 U	0.719 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U
Dibromochloromethane	4	1.7 U	1.78 U	1.7 U					
1,2-Dibromoethane	4	1.54 U	1.61 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
1,2-Dichlorobenzene	880	1.2 U	1.26 U	1.2 U					
1,3-Dichlorobenzene	NS	1.2 U	1.26 U	1.2 U					
1,4-Dichlorobenzene	3	1.2 U	1.26 U	1.2 U					
Dichlorodifluoromethane	440	2.84	3.36	2.98	2.82	3.04	2.8	1.704 U	
1,1-Dichloroethane	8	0.809 U	0.846 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
1,2-Dichloroethane	2	0.809 U	0.846 U	0.81 U	0.81 U	0.809 U	0.809 U	0.809 U	0.809 U
1,1-Dichloroethene	880	0.793 U	0.829 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U
cis-1,2-Dichloroethene	NS	0.793 U	0.829 U	5.04	1.53	1.25	0.793 U	0.793 U	0.793 U
trans-1,2-Dichloroethene	260	0.793 U	0.829 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U
1,2-Dichloropropane	2	0.924 U	0.966 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U
cis-1,3-Dichloropropene	NS	0.908 U	0.949 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
trans-1,3-Dichloropropene	NS	0.908 U	0.949 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
1,3-Dichloropropene (total)	3	0.908 U	0.95 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
1,4-Dioxane	NS	0.721 U	0.753 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
Ethanol	NS	86.9	105	4.71 U	4.71 U	4.71 U	74.4	4.71 U	
Ethylbenzene	5	0.869 U	0.908 U	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U
4-Ethyltoluene	NS	0.983 U	1.03 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
Freon-113	NS	1.53 U	1.6 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U
Freon-114	NS	1.4 U	1.46 U	1.4 U					
Heptane	NS	0.82 U	2.84	1.09	1.64	0.877	0.82 U	0.82 U	0.82 U
Hexachlorobutadiene	5	2.13 U	2.23 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U
n-Hexane	3,100	0.705 UJ	3.29 J	0.705 U	0.705 U	0.705 U	1.1	0.825	
Isopropanol	NS	5.14	6.64	34.2	52.8	17.5	11.85	1.23 U	
Methyl Methacrylate	NS	2.05 U	2.14 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
Methylene chloride	1,200	5.42 J	3.65 UJ	3.47 U	3.47 U	3.47 U	8.96	16.5	
4-Methyl-2-pentanone	13,000	0.82 U	0.857 U	0.82 U	0.82 U	0.82 U	1.43	0.82 U	
Methyl tert butyl ether	47	0.721 U	0.753 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
Styrene	4,400	0.852 U	0.89 U	29	10.7	28.1	0.852 U	0.852 U	
Tertiary butyl Alcohol	NS	1.52 U	1.59 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U
1,1,2,2-Tetrachloroethane	3	1.37 U	1.44 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U
Tetrachloroethene	47	4.22	5.07	26.1	16.4	9.43	3.19	1.36 U	
Tetrahydrofuran	NS	0.59 U	0.616 U	0.59 U					
Toluene	22,000	0.754 UJ	1.19 J	4.6	6.71	3.64	1.22	0.754 U	
1,2,4-Trichlorobenzene	9	1.48 U	1.55 U	1.48 U	1.48 U	1.49 U	1.49 U	1.49 U	1.49 U
1,1,1-Trichloroethane	22,000	1.09 U	1.14 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
1,1,2-Trichloroethane	3	1.09 U	1.14 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
Trichloroethene	3	1.39	1.84	6.23	2.77	1.75	1.07 U	1.08 U	
Trichlorofluoromethane (Freon 11)	3,100	2.51	2.86	1.8	1.66	1.75	3.5	1.65	
1,2,4-Trimethylbenzene	NS	0.983 U	1.55 U	1.41	2.43	1.14	0.983 U	0.983 U	
1,3,5-Trimethylbenzene	NS	0.983 U	1.03 U	0.983 U	1.15	0.983 U	0.983 U	0.983 U	
2,2,4-Trimethylpentane	NS	0.934 U	0.976 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	
Vinyl bromide	NS	0.874 U	0.914 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	
Vinyl chloride	3	0.511 U	0.534 U	0.511 U	0.511 U	0.511 U	0.511 U	0.511 U	
o-Xylene	NS	0.869 U	0.908 U	1.27	1.77	1.05	0.869 U	0.869 U	
p/m-Xylene	NS	1.74 U	1.82 U	3.37	4.6	2.94	1.74 U	1.74 U	
Xylenes (total)	440	1.74 U	1.82 U	4.64	6.37	3.99	1.74 U	1.74 U	

Notes:µg/m³ - micrograms per cubic meter

Bolded values represent compounds above laboratory reporting limits

Bordered, Bold and shaded values represent NJDEP screening level exceedances

NS - No Screening Level for compound

U - undetected, associated value is the method reporting limit

J - result is estimated

TABLE 2
SUB-SLAB SOIL GAS ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, NJ

Location ID:	NJDEP Nonresidential Soil Gas Screening Levels	VI-7		VI-12		VI-13		VI-16			
		SSP-7	6/12/2012	SSP-12	6/12/2012	DUP-01	6/12/2012	SSP-13	6/12/2012	SSP-16	6/12/2012
TO-15 Volatile Organic Compounds ($\mu\text{g}/\text{m}^3$)											
Acetone	6,800,000	556	D	40.1	D	30.2	D	546	D	449	D
Benzene	79	37.4	D	1.83	D	1.98	D	3.19	U	27.6	U
Bromodichloromethane	34	63.8	U	2.67	U	2.69	U	6.7	U	57.8	U
Bromoform	560	98.4	U	4.12	U	4.15	U	10.3	U	89.2	U
Bromomethane	1,100	37	U	1.54	U	1.56	U	3.88	U	33.5	U
1,3-Butadiene	20	21.1	U	0.88	U	0.887	U	2.21	U	19.1	U
2-Butanone	1,100,000	28.1	U	6.28	D	6.31	D	150	D	25.4	U
Carbon disulfide	150,000	29.6	U	2.71	D	1.41	D	10.6	D	26.9	U
Carbon tetrachloride	100	59.9	U	2.5	U	2.52	U	6.29	U	54.3	U
Chlorobenzene	11,000	87.5	D	1.83	U	1.85	U	4.6	U	42.9	D
Chloroethane	2,200,000	25.1	U	1.05	U	1.06	U	2.64	U	22.8	U
Chloroform	27	46.5	U	1.94	U	1.96	U	4.88	U	42.1	U
Chloromethane	20,000	19.6	U	0.822	U	0.828	U	2.06	U	17.8	U
3-Chloropropene	100	29.8	U	1.24	U	1.26	U	3.13	U	27	U
2-Chlorotoluene	NS	49.3	U	2.06	U	2.08	U	5.18	U	44.7	U
Cyclohexane	1,300,000	32.8	U	1.37	U	1.38	U	3.75	D	29.7	U
Dibromochloromethane	43	81.1	U	3.39	U	3.42	U	8.52	U	73.5	U
1,2-Dibromoethane	38	73.2	U	3.06	U	3.08	U	7.68	U	66.3	U
1,2-Dichlorobenzene	44,000	66.7	D	2.39	U	2.41	U	6.01	U	51.9	U
1,3-Dichlorobenzene	NS	57.2	U	2.39	U	2.41	U	6.01	U	51.9	U
1,4-Dichlorobenzene	56	57.2	U	2.39	U	2.41	U	6.01	U	51.9	U
Dichlorodifluoromethane	22,000	47.1	U	2.01	D	2.28	D	4.94	U	42.7	U
1,1-Dichloroethane	380	38.5	U	1.61	U	1.62	U	15.2	D	54.6	D
1,2-Dichloroethane	24	38.5	U	1.61	U	1.62	U	4.05	U	34.9	U
1,1-Dichloroethene	44,000	37.7	U	1.58	U	1.59	U	85.2	D	515	D
cis-1,2-Dichloroethene	NS	2820	D	2.79	D	1.59	U	3.96	U	34.2	U
trans-1,2-Dichloroethene	13,000	37.7	U	1.58	U	1.59	U	3.96	U	34.2	U
1,2-Dichloropropane	61	44	U	1.84	U	1.85	U	4.62	U	39.9	U
cis-1,3-Dichloropropene	NS	43.2	U	1.81	U	1.82	U	4.54	U	39.2	U
trans-1,3-Dichloropropene	NS	43.2	U	1.81	U	1.82	U	4.54	U	39.2	U
1,3-Dichloropropene (total)	150	43.2	U	1.81	U	1.82	U	4.54	U	39.2	U
1,4-Dioxane	NS	34.3	U	1.43	U	1.44	U	3.6	U	164	D
Ethanol	NS	224	U	31.8	D	28.4	D	129	D	203	U
Ethylbenzene	250	108	D	2.49	D	2.6	D	16.7	D	37.5	U
4-Ethyltoluene	NS	46.8	U	1.96	U	1.97	U	4.92	U	42.4	U
Freon-113	NS	73	U	3.05	U	3.07	U	7.66	U	66.1	U
Freon-114	NS	66.5	U	2.78	U	2.8	U	6.99	U	60.3	U
Heptane	NS	39	U	1.63	U	1.64	U	11.2	D	35.4	U
Hexachlorobutadiene	53	102	U	4.24	U	4.28	U	10.7	U	92	U
n-Hexane	150,000	33.6	U	1.4	U	1.41	U	13.8	D	30.4	U
Isopropanol	NS	112	D	19.2	D	14	D	54.1	D	152	D
Methyl Methacrylate	NS	97.4	U	4.08	U	4.09	U	10.2	U	88.4	U
Methylene chloride	61,000	275	D	152	D	158	D	131	D	150	U
4-Methyl-2-pentanone	660,000	39	U	1.63	U	1.64	U	20.1	D	35.4	U
Methyl tert butyl ether	2,400	34.3	U	1.43	U	1.44	U	3.6	U	31.1	U
Styrene	220,000	40.5	U	1.69	U	1.71	U	4.26	U	36.7	U
Tertiary butyl Alcohol	NS	72.1	U	3.02	U	3.03	U	10.7	D	65.5	U
1,1,2,2-Tetrachloroethane	34	65.4	U	2.73	U	2.75	U	6.87	U	59.3	U
Tetrachloroethene	2,400	19400	D	30.9	D	7.73	D	113	D	30500	D
Tetrahydrofuran	NS	28.1	U	1.17	U	1.18	U	2.95	U	25.4	U
Toluene	1,100,000	67.8	D	2.97	D	2.94	D	14.5	D	32.5	U
1,2,4-Trichlorobenzene	440	70.7	U	2.95	U	2.98	U	7.42	U	64.1	U
1,1,1-Trichloroethane	1,100,000	807	D	5.3	D	3.31	D	1540	D	8400	D
1,1,2-Trichloroethane	38	51.9	U	2.17	U	2.19	U	5.46	U	47.1	U
Trichloroethene	150	8220	D	10.6	D	2.16	U	5.37	U	162	D
Trichlorofluoromethane (Freon 11)	150,000	53.5	U	2.26	D	2.25	U	5.62	U	121	D
1,2,4-Trimethylbenzene	NS	46.8	U	1.96	U	1.97	U	8.31	D	42.4	U
1,3,5-Trimethylbenzene	NS	46.8	U	1.96	U	1.97	U	8.06	D	42.4	U
2,2,4-Trimethylpentane	NS	44.5	U	1.86	U	1.87	U	4.67	U	40.3	U
Vinyl bromide	NS	41.6	U	1.74	U	1.75	U	4.37	U	37.7	U
Vinyl chloride	140	24.3	U	1.02	U	1.02	U	2.56	U	22.1	U
o-Xylene	NS	221	D	5.08	D	4.78	D	39.1	D	37.5	U
p/m-Xylene	NS	578	D	10.6	D	10.8	D	98.2	D	74.7	U
Xylenes (total)	22,000	799	D	15.68	D	15.58	D	137.3	D	74.7	U

Notes: $\mu\text{g}/\text{m}^3$ - micrograms per cubic meter

Bolded values represent compounds above laboratory reporting limits

Bordered, Bold and shaded values - represent NJDEP screening level exceedances

Bolded and *Italicized* values represent laboratory reporting limits above the NJDEP screening levels

NS - No Screening Level for compound

U - undetected, associated value is the method reporting limit

D - result from diluted sample

TABLE 3
INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
Former Ingersoll Rand Facility
Phillipsburg, NJ

Location ID:	NJDEP Nonresidential Indoor Air Screening Levels	VI-7 IA-7	VI-13 IA-13	VI-16 IA-16	OA-01
Sample ID:					
Date Sampled:		6/12/2012	6/12/2012	6/12/2012	6/12/2012
TO-15 Volatile Organic Compounds ($\mu\text{g}/\text{m}^3$)					
Acetone	140,000	751 D	22.9	4.25	5.42
Benzene	2	0.639 U	0.783	0.639 U	0.639 U
Bromodichloromethane	3	1.34 U	1.34 U	1.34 U	1.34 U
Bromoform	11	2.07 U	2.07 U	2.07 U	2.07 U
Bromomethane	22	0.777 U	0.777 U	0.777 U	0.777 U
1,3-Butadiene	1	0.442 U	0.442 U	0.442 U	0.442 U
2-Butanone	22,000	3.07	5.07	2.36	0.664
Carbon disulfide	3,100	0.623 U	0.623 U	0.623 U	0.623 U
Carbon tetrachloride	3	1.26 U	1.26 U	1.26 U	1.26 U
Chlorobenzene	220	0.921 U	0.921 U	0.921 U	0.921 U
Chloroethane	44,000	0.528 U	0.528 U	0.528 U	0.528 U
Chloroform	2	0.977 U	0.977 U	1.69	0.977 U
Chloromethane	390	0.82	0.962	1.1	0.886
3-Chloropropene	2	0.626 U	0.626 U	0.626 U	0.626 U
2-Chlorotoluene	NS	1.04 U	1.04 U	1.04 U	1.04 U
Cyclohexane	26,000	0.688 U	0.688 U	0.688 U	0.688 U
Dibromochloromethane	4	1.7 U	1.7 U	1.7 U	1.7 U
1,2-Dibromoethane	4	1.54 U	1.54 U	1.54 U	1.54 U
1,2-Dichlorobenzene	880	1.2 U	1.2 U	1.2 U	1.2 U
1,3-Dichlorobenzene	NS	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	3	1.2 U	1.2 U	1.2 U	1.2 U
Dichlorodifluoromethane	440	2.47	1.64	2.43	1.27
1,1-Dichloroethane	8	0.809 U	0.809 U	0.809 U	0.809 U
1,2-Dichloroethane	2	0.809 U	0.809 U	0.809 U	0.809 U
1,1-Dichloroethene	880	0.793 U	0.793 U	0.793 U	0.793 U
cis-1,2-Dichloroethene	NS	4.28	0.793 U	0.793 U	0.793 U
trans-1,2-Dichloroethene	260	0.793 U	0.793 U	0.793 U	0.793 U
1,2-Dichloropropane	2	0.924 U	0.924 U	0.924 U	0.924 U
cis-1,3-Dichloropropene	NS	0.908 U	0.908 U	0.908 U	0.908 U
trans-1,3-Dichloropropene	NS	0.908 U	0.908 U	0.908 U	0.908 U
1,3-Dichloropropene (total)	3	0.908 U	0.908 U	0.908 U	0.908 U
1,4-Dioxane	NS	0.721 U	0.721 U	0.721 U	0.721 U
Ethanol	NS	4.71 U	16.1	135	4.71 U
Ethylbenzene	5	0.869 U	18.7	0.869 U	0.869 U
4-Ethyltoluene	NS	0.983 U	0.983 U	0.983 U	0.983 U
Freon-113	NS	1.53 U	1.53 U	1.53 U	1.53 U
Freon-114	NS	1.4 U	1.4 U	1.4 U	1.4 U
Heptane	NS	0.82 U	1.27	0.93	0.82 U
Hexachlorobutadiene	5	2.13 U	2.13 U	2.13 U	2.13 U
n-Hexane	3,100	0.705 U	1.9	0.705 U	0.705 U
Isopropanol	NS	17.3	1.23 U	8.06	1.23 U
Methyl Methacrylate	NS	2.05 U	2.05 U	2.05 U	2.05 U
Methylene chloride	1,200	3.47 U	479 D	5.24	3.47 U
4-Methyl-2-pentanone	13,000	0.82 U	2.79	0.82 U	0.82 U
Methyl tert butyl ether	47	0.721 U	0.721 U	0.721 U	0.721 U
Styrene	4,400	89.4	0.852 U	0.852 U	0.852 U
Tertiary butyl Alcohol	NS	1.52 U	1.52 U	1.52 U	1.52 U
1,1,2,2-Tetrachloroethane	3	1.37 U	1.37 U	1.37 U	1.37 U
Tetrachloroethene	47	18.7	1.36 U	1.36 U	1.36 U
Tetrahydrofuran	NS	1.3	0.59 U	0.59 U	0.59 U
Toluene	22,000	2.18	4.86	1.43	0.754 U
1,2,4-Trichlorobenzene	9	1.48 U	1.48 U	1.48 U	1.48 U
1,1,1-Trichloroethane	22,000	1.09 U	2.86	1.09 U	1.09 U
1,1,2-Trichloroethane	3	1.09 U	1.09 U	1.09 U	1.09 U
Trichloroethene	3	5.8	1.07 U	1.07 U	1.07 U
Trichlorofluoromethane (Freon 11)	3,100	1.86	1.3	13.1	1.21
1,2,4-Trimethylbenzene	NS	0.983 U	1.41	0.983 U	0.983 U
1,3,5-Trimethylbenzene	NS	0.983 U	0.983 U	0.983 U	0.983 U
2,2,4-Trimethylpentane	NS	0.934 U	0.934 U	0.934 U	0.934 U
Vinyl bromide	NS	0.874 U	0.874 U	0.874 U	0.874 U
Vinyl chloride	3	0.511 U	0.511 U	0.511 U	0.511 U
o-Xylene	NS	0.895	31.2	0.869 U	0.869 U
p/m-Xylene	NS	2.04	79	1.74 U	1.74 U
Xylenes (total)	440	2.94	110.2	1.74 U	1.74 U

Notes: $\mu\text{g}/\text{m}^3$ - micrograms per cubic meter

Bolded values represent compounds above laboratory reporting limits

Bordered, Bold and shaded values - represent NJDEP screening level exceedances

NS - No Screening Level for compound

U - undetected, associated value is the method reporting limit

D - result from diluted sample

APPENDIX A



New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY
and SAMPLING FORM

Preparer's name: _____ Date: _____

Preparer's affiliation: _____ Phone #: _____

Site Name: _____ Case #: _____

Part I - Occupants

Building Address: _____

Building Block: _____ Lot: _____

Property Contact: _____ Owner / Renter / other: _____

Contact's Phone: home () _____ work () _____ cell () _____

of Building occupants: Children under age 13 _____ Children age 13-18 _____ Adults _____

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial industrial

Describe building: _____ Year constructed: _____

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors below grade: _____ (full basement / crawl space / slab on grade)

Number of floors at or above grade: _____

Depth of basement below grade surface: _____ ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / floating / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify) _____

Basement sump present? Yes No Sump pump? Yes No Water in sump? Yes

Type of heating system (circle all that apply):

hot air circulation hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): _____

Type of ventilation system (circle all that apply):

central air conditioning mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Yes / No

Is there a whole house fan? Yes /

Septic system? Yes / Yes (but not used) /

Irrigation/private well? Yes / Yes (but not used) /

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Existing subsurface depressurization (radon) system in place? Yes / active / passive

Sub-slab vapor/moisture barrier in place? Yes /

Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes / No How often? _____

Last time someone smoked in the building? _____ hours / days ago

Does the building have an attached garage directly connected to living space? Yes / No

If so, is a car usually parked in the garage? Yes / No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes / No

Do the occupants of the building have their clothes dry cleaned? Yes / No

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? Yes / No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No

Have any pesticides/herbicides been applied around the building or in the yard? Yes / No

If so, when and which chemicals? _____

Has there ever been a fire in the building? Yes / No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes / No

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: _____ Phone number: () _____ - _____

Company: _____

Sample Source: Indoor Air Sub-Slab Near Slab Soil Gas / Exterior Soil Gas

Were “Instructions for Occupants” followed? Yes / No

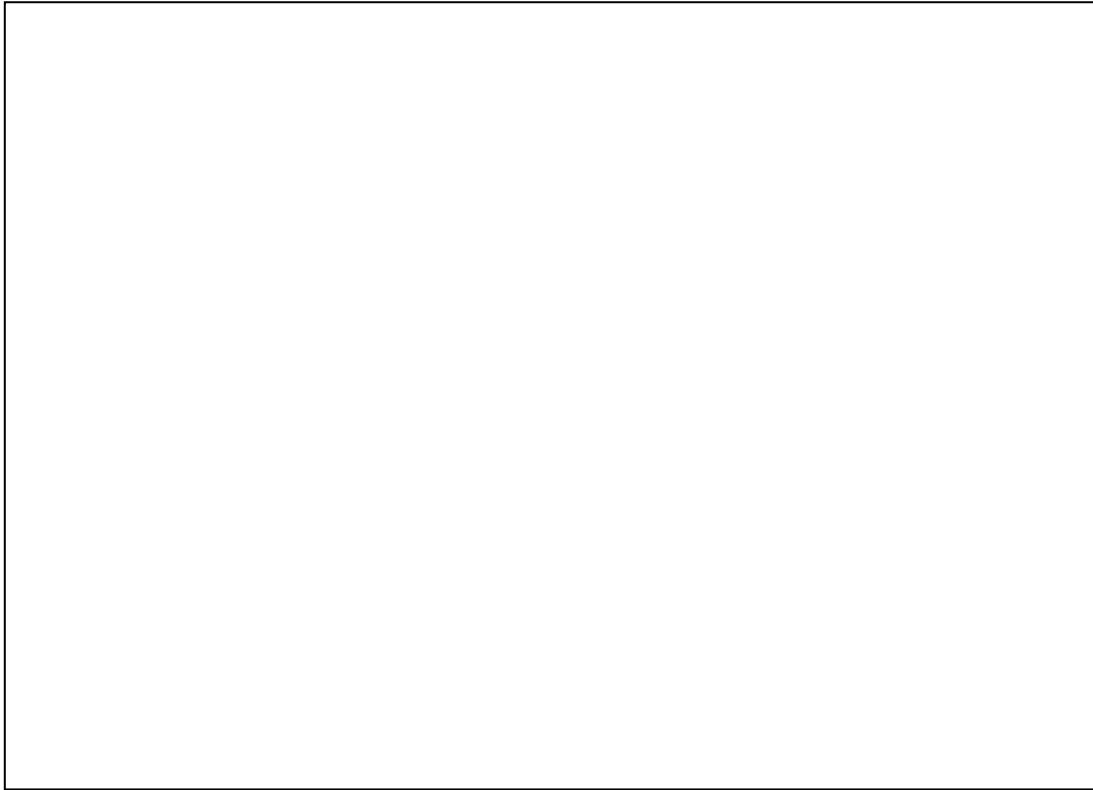
If not, describe modifications: _____

Sample locations (floor, room):

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building



Type of field instrument used (include summary of results): _____

Part VII - Meteorological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event? Yes No

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

APPENDIX B

SITE PHOTOGRAPHS

Photograph 1

Date: 01/22/13

Location: Curtis Wright
Building

Photo showing location of indoor air suma canister located within office space of building #7 (Curtis Wright Building). Sample ID IA-05.



Photograph 2

Date: 01/22/13

Location: Curtis Wright
Building

Photo depicting indoor air canister located within main bay and near large test pit. Sample ID IA-04.



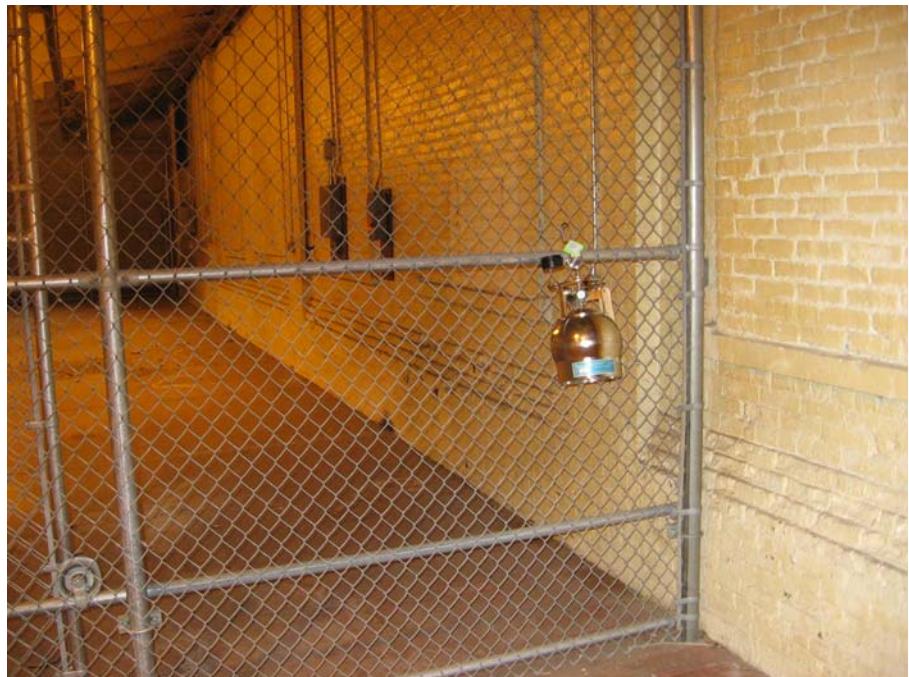
SITE PHOTOGRAPHS

Photograph 3

Date: 01/22/13

Location: Curtis Wright
Building

Photo showing location of
indoor air canister located at
southern end of facility.
Sample ID IA-03.



Photograph 4

Date: 01/22/13

Location: Curtis Wright
Building

Photo showing location of
indoor air canister located at
northern end of facility. Sample
ID IA-02.



APPENDIX C



ANALYTICAL REPORT

Lab Number:	L1301460
Client:	Geosyntec Consultants 7 Graphics Drive Suite 106 Ewing, NJ 08628
ATTN:	Jared Brisman
Phone:	(609) 895-1400
Project Name:	INGOSOLL ROAD
Project Number:	PHILLIPSBURGH
Report Date:	01/28/13

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Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1301460-01	IA-01	PHILLIPSBURG, NJ	01/23/13 09:10
L1301460-02	IA-02	PHILLIPSBURG, NJ	01/23/13 09:12
L1301460-03	IA-03	PHILLIPSBURG, NJ	01/23/13 09:15
L1301460-04	IA-04	PHILLIPSBURG, NJ	01/23/13 09:16
L1301460-05	IA-05	PHILLIPSBURG, NJ	01/23/13 09:19
L1301460-06	OA-01	PHILLIPSBURG, NJ	01/23/13 09:38
L1301460-07	DUP-01	PHILLIPSBURG, NJ	01/23/13 00:00

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on January 21, 2013. The canister certification results are provided as an addendum.

L1301460-06 The RPD of the pre- and post-flow controller calibration check (93% RPD) was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 3.0 mL/minute; the final flow rate was 1.1 mL/minute. The final pressure recorded by the laboratory of the associated canister was -9.0 inches of mercury.

L1301460-07 The RPD of the pre- and post-flow controller calibration check (67% RPD) was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 3.2 mL/minute; the final flow rate was 1.6 mL/minute. The final pressure recorded by the laboratory of the associated canister was -18.2 inches of mercury.

L1301460-07 has elevated detection limits due to low sample volume collected in the canister.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Christopher J. Anderson Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/28/13

AIR



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-01	Date Collected:	01/23/13 09:10
Client ID:	IA-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	01/24/13 17:04		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.575	0.200	--	2.84	0.989	--		1
Chloromethane	0.504	0.200	--	1.04	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	46.1	2.50	--	86.9	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.01	1.00	--	7.15	2.38	--		1
Trichlorofluoromethane	0.446	0.200	--	2.51	1.12	--		1
Isopropanol	2.09	0.500	--	5.14	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	1.56	1.00	--	5.42	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-01	Date Collected:	01/23/13 09:10
Client ID:	IA-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	ND	0.200	--	ND	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	0.259	0.200	--	1.39	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	ND	0.200	--	ND	0.754	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	0.622	0.200	--	4.22	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-01	Date Collected:	01/23/13 09:10
Client ID:	IA-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air - Mansfield Lab							
o-Xylene	ND	0.200	--	ND	0.869	--	1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
D-Limonene	1.2	NJ	ppbV		1
Difluorochloromethane	2.5	NJ	ppbV		1
Methyl Alcohol	1.5	NJ	ppbV		1
Unknown Siloxane	2.4	J	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	83		60-140



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-02	Date Collected:	01/23/13 09:12
Client ID:	IA-02	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	01/24/13 17:35		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.602	0.200	--	2.98	0.989	--		1
Chloromethane	0.492	0.200	--	1.02	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	82.4	1.00	--	196	2.38	--		1
Trichlorofluoromethane	0.321	0.200	--	1.80	1.12	--		1
Isopropanol	13.9	0.500	--	34.2	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.376	0.200	--	1.11	0.590	--		1
cis-1,2-Dichloroethene	1.27	0.200	--	5.04	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-02	Date Collected:	01/23/13 09:12
Client ID:	IA-02	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Dilution Factor	
		RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	0.211	0.200	--	0.674	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	1.16	0.200	--	6.23	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	0.265	0.200	--	1.09	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	1.22	0.200	--	4.60	0.754	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	3.86	0.200	--	26.2	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	0.777	0.400	--	3.37	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	6.80	0.200	--	29.0	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-02	Date Collected:	01/23/13 09:12
Client ID:	IA-02	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
o-Xylene	0.292	0.200	--	1.27	0.869	--	1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	0.286	0.200	--	1.41	0.983	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Propane	4.5	NJ	ppbV		1
Nonane (C9)	1.2	NJ	ppbV		1
Methyl nitrite	3.5	NJ	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	86		60-140



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-03	Date Collected:	01/23/13 09:15
Client ID:	IA-03	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	01/24/13 18:07		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.570	0.200	--	2.82	0.989	--		1
Chloromethane	0.480	0.200	--	0.991	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	34.7	1.00	--	82.4	2.38	--		1
Trichlorofluoromethane	0.295	0.200	--	1.66	1.12	--		1
Isopropanol	21.5	0.500	--	52.8	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.403	0.200	--	1.19	0.590	--		1
cis-1,2-Dichloroethene	0.385	0.200	--	1.53	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-03	Date Collected:	01/23/13 09:15
Client ID:	IA-03	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	0.213	0.200	--	0.680	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	0.516	0.200	--	2.77	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	0.401	0.200	--	1.64	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	1.78	0.200	--	6.71	0.754	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	2.42	0.200	--	16.4	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	1.06	0.400	--	4.60	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	2.52	0.200	--	10.7	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-03	Date Collected:	01/23/13 09:15
Client ID:	IA-03	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air - Mansfield Lab							
o-Xylene	0.408	0.200	--	1.77	0.869	--	1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	0.234	0.200	--	1.15	0.983	--	1
1,2,4-Trimethylbenzene	0.495	0.200	--	2.43	0.983	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Propane	5.8	NJ	ppbV		1
Propene	1.0	NJ	ppbV		1
Octane	2.3	NJ	ppbV		1
Methyl nitrite	3.1	NJ	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	82		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	89		60-140



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-04	Date Collected:	01/23/13 09:16
Client ID:	IA-04	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	01/24/13 19:11		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.614	0.200	--	3.04	0.989	--		1
Chloromethane	0.485	0.200	--	1.00	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	74.4	1.00	--	177	2.38	--		1
Trichlorofluoromethane	0.312	0.200	--	1.75	1.12	--		1
Isopropanol	7.10	0.500	--	17.5	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.345	0.200	--	1.02	0.590	--		1
cis-1,2-Dichloroethene	0.315	0.200	--	1.25	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-04	Date Collected:	01/23/13 09:16
Client ID:	IA-04	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	0.203	0.200	--	0.649	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	0.326	0.200	--	1.75	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	0.214	0.200	--	0.877	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	0.967	0.200	--	3.64	0.754	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	1.39	0.200	--	9.43	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	0.678	0.400	--	2.94	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	6.61	0.200	--	28.1	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-04	Date Collected:	01/23/13 09:16
Client ID:	IA-04	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
o-Xylene	0.242	0.200	--	1.05	0.869	--	1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	0.231	0.200	--	1.14	0.983	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Propane	3.4	NJ	ppbV		1
Methyl nitrite	2.9	NJ	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	84		60-140

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-05	Date Collected:	01/23/13 09:19
Client ID:	IA-05	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	01/24/13 19:43		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.567	0.200	--	2.80	0.989	--		1
Chloromethane	0.522	0.200	--	1.08	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	39.5	2.50	--	74.4	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.62	1.00	--	11.0	2.38	--		1
Trichlorofluoromethane	0.623	0.200	--	3.50	1.12	--		1
Isopropanol	4.82	0.500	--	11.8	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	2.58	1.00	--	8.96	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.366	0.200	--	1.08	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-05	Date Collected:	01/23/13 09:19
Client ID:	IA-05	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Dilution Factor	
		RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.313	0.200	--	1.10	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	0.223	0.200	--	0.712	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	ND	0.200	--	ND	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	0.349	0.200	--	1.43	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	0.325	0.200	--	1.22	0.754	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	0.471	0.200	--	3.19	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-05	Date Collected:	01/23/13 09:19
Client ID:	IA-05	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
o-Xylene	ND	0.200	--	ND	0.869	--	1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Propane	1.2	NJ	ppbV		1
Methyl Alcohol	5.3	NJ	ppbV		1
Unknown Siloxane	2.2	J	ppbV		1
Difluorochloromethane	3.0	NJ	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	68		60-140
Bromochloromethane	77		60-140
chlorobenzene-d5	80		60-140



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-06	Date Collected:	01/23/13 09:38
Client ID:	OA-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	01/24/13 16:32		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.525	0.200	--	2.60	0.989	--		1
Chloromethane	0.610	0.200	--	1.26	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.92	1.00	--	6.94	2.38	--		1
Trichlorofluoromethane	0.293	0.200	--	1.65	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	4.75	1.00	--	16.5	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.224	0.200	--	0.661	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-06	Date Collected:	01/23/13 09:38
Client ID:	OA-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.234	0.200	--	0.825	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	ND	0.200	--	ND	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	ND	0.200	--	ND	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	ND	0.200	--	ND	0.754	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	ND	0.200	--	ND	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-06	Date Collected:	01/23/13 09:38
Client ID:	OA-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
o-Xylene	ND	0.200	--	ND	0.869	--	1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Methyl Alcohol	1.1	NJ	ppbV		1
Propane	1.0	NJ	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	72		60-140
chlorobenzene-d5	91		60-140



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-07 D	Date Collected:	01/23/13 00:00
Client ID:	DUP-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	01/24/13 20:15		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.680	0.209	--	3.36	1.03	--		1.046
Chloromethane	0.584	0.209	--	1.21	0.432	--		1.046
Freon-114	ND	0.209	--	ND	1.46	--		1.046
Vinyl chloride	ND	0.209	--	ND	0.534	--		1.046
1,3-Butadiene	ND	0.209	--	ND	0.462	--		1.046
Bromomethane	ND	0.209	--	ND	0.812	--		1.046
Chloroethane	ND	0.209	--	ND	0.552	--		1.046
Ethanol	55.6	2.62	--	105	4.94	--		1.046
Vinyl bromide	ND	0.209	--	ND	0.914	--		1.046
Acetone	5.50	1.05	--	13.1	2.49	--		1.046
Trichlorofluoromethane	0.509	0.209	--	2.86	1.17	--		1.046
Isopropanol	2.70	0.523	--	6.64	1.29	--		1.046
1,1-Dichloroethene	ND	0.209	--	ND	0.829	--		1.046
Tertiary butyl Alcohol	ND	0.523	--	ND	1.59	--		1.046
Methylene chloride	ND	1.05	--	ND	3.65	--		1.046
3-Chloropropene	ND	0.209	--	ND	0.654	--		1.046
Carbon disulfide	ND	0.209	--	ND	0.651	--		1.046
Freon-113	ND	0.209	--	ND	1.60	--		1.046
trans-1,2-Dichloroethene	ND	0.209	--	ND	0.829	--		1.046
1,1-Dichloroethane	ND	0.209	--	ND	0.846	--		1.046
Methyl tert butyl ether	ND	0.209	--	ND	0.754	--		1.046
2-Butanone	0.585	0.209	--	1.73	0.616	--		1.046
cis-1,2-Dichloroethene	ND	0.209	--	ND	0.829	--		1.046
Chloroform	ND	0.209	--	ND	1.02	--		1.046



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID:	L1301460-07 D	Date Collected:	01/23/13 00:00
Client ID:	DUP-01	Date Received:	01/23/13
Sample Location:	PHILLIPSBURG, NJ	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
Tetrahydrofuran	ND	0.209	--	ND	0.616	--	1.046
1,2-Dichloroethane	ND	0.209	--	ND	0.846	--	1.046
n-Hexane	0.933	0.209	--	3.29	0.737	--	1.046
1,1,1-Trichloroethane	ND	0.209	--	ND	1.14	--	1.046
Benzene	0.278	0.209	--	0.888	0.668	--	1.046
Carbon tetrachloride	ND	0.209	--	ND	1.31	--	1.046
Cyclohexane	ND	0.209	--	ND	0.719	--	1.046
1,2-Dichloropropane	ND	0.209	--	ND	0.966	--	1.046
Bromodichloromethane	ND	0.209	--	ND	1.40	--	1.046
1,4-Dioxane	ND	0.209	--	ND	0.753	--	1.046
Trichloroethene	0.342	0.209	--	1.84	1.12	--	1.046
2,2,4-Trimethylpentane	ND	0.209	--	ND	0.976	--	1.046
Methyl Methacrylate	ND	0.523	--	ND	2.14	--	1.046
Heptane	0.693	0.209	--	2.84	0.857	--	1.046
cis-1,3-Dichloropropene	ND	0.209	--	ND	0.949	--	1.046
4-Methyl-2-pentanone	ND	0.209	--	ND	0.857	--	1.046
trans-1,3-Dichloropropene	ND	0.209	--	ND	0.949	--	1.046
1,1,2-Trichloroethane	ND	0.209	--	ND	1.14	--	1.046
Toluene	0.317	0.209	--	1.19	0.788	--	1.046
Dibromochloromethane	ND	0.209	--	ND	1.78	--	1.046
1,2-Dibromoethane	ND	0.209	--	ND	1.61	--	1.046
Tetrachloroethene	0.747	0.209	--	5.07	1.42	--	1.046
Chlorobenzene	ND	0.209	--	ND	0.963	--	1.046
Ethylbenzene	ND	0.209	--	ND	0.908	--	1.046
p/m-Xylene	ND	0.418	--	ND	1.82	--	1.046
Bromoform	ND	0.209	--	ND	2.16	--	1.046
Styrene	ND	0.209	--	ND	0.890	--	1.046
1,1,2,2-Tetrachloroethane	ND	0.209	--	ND	1.44	--	1.046



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

SAMPLE RESULTS

Lab ID: L1301460-07 D Date Collected: 01/23/13 00:00
Client ID: DUP-01 Date Received: 01/23/13
Sample Location: PHILLIPSBURG, NJ Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							
o-Xylene	ND	0.209	--	ND	0.908	--	1.046
2-Chlorotoluene	ND	0.209	--	ND	1.08	--	1.046
4-Ethyltoluene	ND	0.209	--	ND	1.03	--	1.046
1,3,5-Trimethylbenzene	ND	0.209	--	ND	1.03	--	1.046
1,2,4-Trimethylbenzene	ND	0.209	--	ND	1.03	--	1.046
1,3-Dichlorobenzene	ND	0.209	--	ND	1.26	--	1.046
1,4-Dichlorobenzene	ND	0.209	--	ND	1.26	--	1.046
1,2-Dichlorobenzene	ND	0.209	--	ND	1.26	--	1.046
1,2,4-Trichlorobenzene	ND	0.209	--	ND	1.55	--	1.046
Hexachlorobutadiene	ND	0.209	--	ND	2.23	--	1.046

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Acetaldehyde	1.4	NJ	ppbV		1.046
Pentane	1.1	NJ	ppbV		1.046
Butane	1.4	NJ	ppbV		1.046
D-Limonene	1.5	NJ	ppbV		1.046
Difluorochloromethane	2.8	NJ	ppbV		1.046
Unknown Siloxane	1.6	J	ppbV		1.046
Methyl Alcohol	1.8	NJ	ppbV		1.046
Propane	2.4	NJ	ppbV		1.046

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	63		60-140
Bromochloromethane	73		60-140
chlorobenzene-d5	64		60-140



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/24/13 14:38

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG586911-4							
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	1
Chloromethane	ND	0.200	--	ND	0.413	--	1
Freon-114	ND	0.200	--	ND	1.40	--	1
Vinyl chloride	ND	0.200	--	ND	0.511	--	1
1,3-Butadiene	ND	0.200	--	ND	0.442	--	1
Bromomethane	ND	0.200	--	ND	0.777	--	1
Chloroethane	ND	0.200	--	ND	0.528	--	1
Ethanol	ND	2.50	--	ND	4.71	--	1
Vinyl bromide	ND	0.200	--	ND	0.874	--	1
Acetone	ND	1.00	--	ND	2.38	--	1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	1
Isopropanol	ND	0.500	--	ND	1.23	--	1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	1
Methylene chloride	ND	1.00	--	ND	3.47	--	1
3-Chloropropene	ND	0.200	--	ND	0.626	--	1
Carbon disulfide	ND	0.200	--	ND	0.623	--	1
Freon-113	ND	0.200	--	ND	1.53	--	1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	1
2-Butanone	ND	0.200	--	ND	0.590	--	1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/24/13 14:38

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG586911-4							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	ND	0.200	--	ND	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	ND	0.200	--	ND	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	ND	0.200	--	ND	0.754	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	ND	0.200	--	ND	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/24/13 14:38

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG586911-4							
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	ND	0.200	--	ND	0.869	--	1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					



Lab Control Sample Analysis

Batch Quality Control

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG586911-3								
Dichlorodifluoromethane	101	-	-	-	70-130	-	-	-
Chloromethane	86	-	-	-	70-130	-	-	-
1,2-Dichloro-1,1,2,2-tetrafluoroethane	94	-	-	-	70-130	-	-	-
Vinyl chloride	85	-	-	-	70-130	-	-	-
1,3-Butadiene	86	-	-	-	70-130	-	-	-
Bromomethane	88	-	-	-	70-130	-	-	-
Chloroethane	85	-	-	-	70-130	-	-	-
Ethyl Alcohol	73	-	-	-	70-130	-	-	-
Vinyl bromide	93	-	-	-	70-130	-	-	-
Acetone	88	-	-	-	70-130	-	-	-
Trichlorofluoromethane	103	-	-	-	70-130	-	-	-
iso-Propyl Alcohol	84	-	-	-	70-130	-	-	-
1,1-Dichloroethene	89	-	-	-	70-130	-	-	-
tert-Butyl Alcohol	81	-	-	-	70-130	-	-	-
Methylene chloride	83	-	-	-	70-130	-	-	-
3-Chloropropene	83	-	-	-	70-130	-	-	-
Carbon disulfide	82	-	-	-	70-130	-	-	-
1,1,2-Trichloro-1,2,2-Trifluoroethane	95	-	-	-	70-130	-	-	-
trans-1,2-Dichloroethene	80	-	-	-	70-130	-	-	-
1,1-Dichloroethane	88	-	-	-	70-130	-	-	-
Methyl tert butyl ether	94	-	-	-	70-130	-	-	-

Lab Control Sample Analysis

Batch Quality Control

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG586911-3								
2-Butanone	93	-	-	-	70-130	-	-	-
cis-1,2-Dichloroethene	106	-	-	-	70-130	-	-	-
Chloroform	102	-	-	-	70-130	-	-	-
Tetrahydrofuran	84	-	-	-	70-130	-	-	-
1,2-Dichloroethane	99	-	-	-	70-130	-	-	-
n-Hexane	91	-	-	-	70-130	-	-	-
1,1,1-Trichloroethane	104	-	-	-	70-130	-	-	-
Benzene	89	-	-	-	70-130	-	-	-
Carbon tetrachloride	108	-	-	-	70-130	-	-	-
Cyclohexane	91	-	-	-	70-130	-	-	-
1,2-Dichloropropane	91	-	-	-	70-130	-	-	-
Bromodichloromethane	100	-	-	-	70-130	-	-	-
1,4-Dioxane	88	-	-	-	70-130	-	-	-
Trichloroethene	104	-	-	-	70-130	-	-	-
2,2,4-Trimethylpentane	91	-	-	-	70-130	-	-	-
Methyl methacrylate	94	-	-	-	70-130	-	-	-
Heptane	89	-	-	-	70-130	-	-	-
cis-1,3-Dichloropropene	98	-	-	-	70-130	-	-	-
4-Methyl-2-pentanone	88	-	-	-	70-130	-	-	-
trans-1,3-Dichloropropene	86	-	-	-	70-130	-	-	-
1,1,2-Trichloroethane	100	-	-	-	70-130	-	-	-

Lab Control Sample Analysis

Batch Quality Control

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG586911-3								
Toluene	99	-	-	-	70-130	-	-	-
Dibromochloromethane	107	-	-	-	70-130	-	-	-
1,2-Dibromoethane	108	-	-	-	70-130	-	-	-
Tetrachloroethene	109	-	-	-	70-130	-	-	-
Chlorobenzene	108	-	-	-	70-130	-	-	-
Ethylbenzene	104	-	-	-	70-130	-	-	-
p/m-Xylene	105	-	-	-	70-130	-	-	-
Bromoform	106	-	-	-	70-130	-	-	-
Styrene	104	-	-	-	70-130	-	-	-
1,1,2,2-Tetrachloroethane	105	-	-	-	70-130	-	-	-
o-Xylene	108	-	-	-	70-130	-	-	-
o-Chlorotoluene	104	-	-	-	70-130	-	-	-
4-Ethyltoluene	98	-	-	-	70-130	-	-	-
1,3,5-Trimethylbenzene	108	-	-	-	70-130	-	-	-
1,2,4-Trimethylbenzene	112	-	-	-	70-130	-	-	-
1,3-Dichlorobenzene	114	-	-	-	70-130	-	-	-
1,4-Dichlorobenzene	112	-	-	-	70-130	-	-	-
1,2-Dichlorobenzene	116	-	-	-	70-130	-	-	-
1,2,4-Trichlorobenzene	125	-	-	-	70-130	-	-	-
Hexachlorobutadiene	119	-	-	-	70-130	-	-	-

Lab Duplicate Analysis
Batch Quality Control

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG586911-5 QC Sample: L1301460-03 Client ID: IA-03						
Dichlorodifluoromethane	0.570	0.558	ppbV	2		25
Chloromethane	0.480	0.493	ppbV	3		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	34.7	35.4	ppbV	2		25
Trichlorofluoromethane	0.295	0.312	ppbV	6		25
Isopropanol	21.5	21.8	ppbV	1		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG586911-5 QC Sample: L1301460-03 Client ID: IA-03					
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
2-Butanone	0.403	0.436	ppbV	8	25
cis-1,2-Dichloroethene	0.385	0.405	ppbV	5	25
Chloroform	ND	ND	ppbV	NC	25
Tetrahydrofuran	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	ND	ND	ppbV	NC	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	0.213	0.209	ppbV	2	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Cyclohexane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
Trichloroethene	0.516	0.484	ppbV	6	25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC	25
Methyl Methacrylate	ND	ND	ppbV	NC	25
Heptane	0.401	0.392	ppbV	2	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG586911-5 QC Sample: L1301460-03 Client ID: IA-03					
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	1.78	1.88	ppbV	5	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	2.42	2.49	ppbV	3	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	ND	0.210	ppbV	NC	25
p/m-Xylene	1.06	1.11	ppbV	5	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	2.52	2.72	ppbV	8	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.408	0.422	ppbV	3	25
2-Chlorotoluene	ND	ND	ppbV	NC	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	0.234	0.242	ppbV	3	25
1,2,4-Trimethylbenzene	0.495	0.535	ppbV	8	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG586911-5 QC Sample: L1301460-03 Client ID: IA-03					
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: INGOSOLL ROAD

Serial_No:01281311:52

Project Number: PHILLIPSBURGH

Lab Number: L1301460

Report Date: 01/28/13

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1301460-01	IA-01	0125	#16 AMB	01/21/13	84840		-	-	-	Pass	3.2	2.9	10
L1301460-01	IA-01	1519	6.0L Can	01/21/13	84840	L1300539-04	Pass	-28.8	-8.8	-	-	-	-
L1301460-02	IA-02	0151	#16 AMB	01/21/13	84840		-	-	-	Pass	3.1	2.9	7
L1301460-02	IA-02	1625	6.0L Can	01/21/13	84840	L1300539-04	Pass	-28.9	-8.1	-	-	-	-
L1301460-03	IA-03	0124	#20 AMB	01/21/13	84840		-	-	-	Pass	3.1	3.0	3
L1301460-03	IA-03	697	6.0L Can	01/21/13	84840	L1300539-04	Pass	-28.9	-5.6	-	-	-	-
L1301460-04	IA-04	0445	#16 AMB	01/21/13	84840		-	-	-	Pass	3.0	2.8	7
L1301460-04	IA-04	1610	6.0L Can	01/21/13	84840	L1300539-04	Pass	-28.9	-10.3	-	-	-	-
L1301460-05	IA-05	0371	#16 AMB	01/21/13	84840		-	-	-	Pass	3.0	2.6	14
L1301460-05	IA-05	785	6.0L Can	01/21/13	84840	L1300853-04	Pass	-28.6	-13.4	-	-	-	-
L1301460-06	OA-01	0215	#16 AMB	01/21/13	84840		-	-	-	Pass	3.0	1.1	93
L1301460-06	OA-01	991	6.0L Can	01/21/13	84840	L1300539-04	Pass	-28.2	-9.0	-	-	-	-
L1301460-07	DUP-01	0182	#16 AMB	01/21/13	84840		-	-	-	Pass	3.2	1.6	67
L1301460-07	DUP-01	1707	6.0L Can	01/21/13	84840	L1300853-04	Pass	-28.9	-18.2	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 01/11/13 17:34
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
3-Chloropropene	ND	0.200	--	0.626	--		1
Carbon disulfide	ND	0.200	--	0.623	--		1
Freon-113	ND	0.200	--	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	0.721	--		1
Vinyl acetate	ND	0.200	--	0.704	--		1
2-Butanone	ND	0.200	--	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	0.793	--		1
Ethyl Acetate	ND	0.500	--	1.80	--		1
Chloroform	ND	0.200	--	0.977	--		1
Tetrahydrofuran	ND	0.200	--	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	0.809	--		1
n-Hexane	ND	0.200	--	0.705	--		1
Diisopropyl ether	ND	0.200	--	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	0.908	--		1
Benzene	ND	0.200	--	0.639	--		1
Carbon tetrachloride	ND	0.200	--	1.26	--		1
Cyclohexane	ND	0.200	--	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	0.836	--		1
Dibromomethane	ND	0.200	--	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	0.924	--		1
Bromodichloromethane	ND	0.200	--	1.34	--		1
1,4-Dioxane	ND	0.200	--	0.721	--		1
Trichloroethene	ND	0.200	--	1.07	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
2,2,4-Trimethylpentane	ND	0.200	--	0.934	--		1
Methyl Methacrylate	ND	0.500	--	2.05	--		1
Heptane	ND	0.200	--	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	1.09	--		1
Toluene	ND	0.200	--	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	0.924	--		1
2-Hexanone	ND	0.200	--	0.820	--		1
Dibromochloromethane	ND	0.200	--	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	1.54	--		1
Butyl acetate	ND	0.500	--	2.38	--		1
Octane	ND	0.200	--	0.934	--		1
Tetrachloroethene	ND	0.200	--	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	1.37	--		1
Chlorobenzene	ND	0.200	--	0.921	--		1
Ethylbenzene	ND	0.200	--	0.869	--		1
p/m-Xylene	ND	0.400	--	1.74	--		1
Bromoform	ND	0.200	--	2.07	--		1
Styrene	ND	0.200	--	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	1.37	--		1
o-Xylene	ND	0.200	--	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	1.21	--		1
Nonane	ND	0.200	--	1.05	--		1
Isopropylbenzene	ND	0.200	--	0.983	--		1
Bromobenzene	ND	0.200	--	0.793	--		1
2-Chlorotoluene	ND	0.200	--	1.04	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
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Tentatively Identified Compounds

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/11/13 17:34
 Analyst: RY

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--	1
Chloromethane	ND	0.500	--	ND	1.03	--	1
Freon-114	ND	0.050	--	ND	0.349	--	1
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,3-Butadiene	ND	0.020	--	ND	0.044	--	1
Bromomethane	ND	0.020	--	ND	0.078	--	1
Chloroethane	ND	0.020	--	ND	0.053	--	1
Acetone	ND	2.00	--	ND	4.75	--	1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--	1
Acrylonitrile	ND	0.500	--	ND	1.09	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Methylene chloride	ND	1.00	--	ND	3.47	--	1
Freon-113	ND	0.050	--	ND	0.383	--	1
Halothane	ND	0.050	--	ND	0.404	--	1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--	1
2-Butanone	ND	0.500	--	ND	1.47	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Chloroform	ND	0.020	--	ND	0.098	--	1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Benzene	ND	0.100	--	ND	0.319	--	1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--	1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Bromodichloromethane	ND	0.020	--	0.134	--		1
1,4-Dioxane	ND	0.100	--	0.360	--		1
Trichloroethene	ND	0.020	--	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	0.109	--		1
Toluene	ND	0.050	--	0.188	--		1
Dibromochloromethane	ND	0.020	--	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	0.154	--		1
Tetrachloroethene	ND	0.020	--	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
Chlorobenzene	ND	0.020	--	0.092	--		1
Ethylbenzene	ND	0.020	--	0.087	--		1
p/m-Xylene	ND	0.040	--	0.174	--		1
Bromoform	ND	0.020	--	0.207	--		1
Styrene	ND	0.020	--	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
o-Xylene	ND	0.020	--	0.087	--		1
Isopropylbenzene	ND	0.500	--	2.46	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	0.120	--		1
sec-Butylbenzene	ND	0.500	--	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	0.120	--		1
n-Butylbenzene	ND	0.500	--	2.74	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300539

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300539-04 Date Collected: 01/09/13 13:43
 Client ID: CAN 1634 SHELF #58 Date Received: 01/10/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Naphthalene	ND	0.050	--	ND	0.262	--	1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300853

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
 Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
 Sample Location: Field Prep: Not Specified
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 01/15/13 18:55
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300853

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
 Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
Methylene chloride	ND	1.00	--	ND	3.47	--	1
3-Chloropropene	ND	0.200	--	ND	0.626	--	1
Carbon disulfide	ND	0.200	--	ND	0.623	--	1
Freon-113	ND	0.200	--	ND	1.53	--	1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	1
Vinyl acetate	ND	0.200	--	ND	0.704	--	1
2-Butanone	ND	0.200	--	ND	0.590	--	1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
Diisopropyl ether	ND	0.200	--	ND	0.836	--	1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--	1
Benzene	ND	0.200	--	ND	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--	1
Dibromomethane	ND	0.200	--	ND	1.42	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300853

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
 Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
Trichloroethene	ND	0.200	--	ND	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	ND	0.200	--	ND	0.754	--	1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Butyl acetate	ND	0.500	--	ND	2.38	--	1
Octane	ND	0.200	--	ND	0.934	--	1
Tetrachloroethene	ND	0.200	--	ND	1.36	--	1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	ND	0.200	--	ND	0.869	--	1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--	1
Nonane	ND	0.200	--	ND	1.05	--	1
Isopropylbenzene	ND	0.200	--	ND	0.983	--	1
Bromobenzene	ND	0.200	--	ND	0.793	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300853

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
 Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
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Tentatively Identified Compounds

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Serial_No:01281311:52

Lab Number: L1300853
Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	119		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300853

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
 Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
 Sample Location: Field Prep: Not Specified
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/15/13 18:55
 Analyst: MB

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--	1
Chloromethane	ND	0.500	--	ND	1.03	--	1
Freon-114	ND	0.050	--	ND	0.349	--	1
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,3-Butadiene	ND	0.020	--	ND	0.044	--	1
Bromomethane	ND	0.020	--	ND	0.078	--	1
Chloroethane	ND	0.020	--	ND	0.053	--	1
Acetone	ND	2.00	--	ND	4.75	--	1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--	1
Acrylonitrile	ND	0.500	--	ND	1.09	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Methylene chloride	ND	1.00	--	ND	3.47	--	1
Freon-113	ND	0.050	--	ND	0.383	--	1
Halothane	ND	0.050	--	ND	0.404	--	1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--	1
2-Butanone	ND	0.500	--	ND	1.47	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Chloroform	ND	0.020	--	ND	0.098	--	1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Benzene	ND	0.100	--	ND	0.319	--	1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--	1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300853

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
 Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Bromodichloromethane	ND	0.020	--	0.134	--		1
1,4-Dioxane	ND	0.100	--	0.360	--		1
Trichloroethene	ND	0.020	--	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	0.109	--		1
Toluene	ND	0.050	--	0.188	--		1
Dibromochloromethane	ND	0.020	--	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	0.154	--		1
Tetrachloroethene	ND	0.020	--	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
Chlorobenzene	ND	0.020	--	0.092	--		1
Ethylbenzene	ND	0.020	--	0.087	--		1
p/m-Xylene	ND	0.040	--	0.174	--		1
Bromoform	ND	0.020	--	0.207	--		1
Styrene	ND	0.020	--	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
o-Xylene	ND	0.020	--	0.087	--		1
Isopropylbenzene	ND	0.500	--	2.46	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	0.120	--		1
sec-Butylbenzene	ND	0.500	--	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	0.120	--		1
n-Butylbenzene	ND	0.500	--	2.74	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1300853

Project Number: CANISTER QC BAT

Report Date: 01/28/13

Air Canister Certification Results

Lab ID: L1300853-04 Date Collected: 01/14/13 14:03
 Client ID: CAN 785 SHELF 56 Date Received: 01/15/13
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Naphthalene	ND	0.050	--	ND	0.262	--	1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	121		60-140
chlorobenzene-d5	93		60-140

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

N/A Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1301460-01A	Canister - 6 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1301460-02A	Canister - 6 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1301460-03A	Canister - 6 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1301460-04A	Canister - 6 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1301460-05A	Canister - 6 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1301460-06A	Canister - 6 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1301460-07A	Canister - 6 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

GLOSSARY

Acronyms

- EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD - Laboratory Control Sample Duplicate: Refer to LCS.
- LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- NI - Not Ignitable.
- RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
- SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

Data Qualifiers

due to obvious interference.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name: INGOSOLL ROAD
Project Number: PHILLIPSBURGH

Lab Number: L1301460
Report Date: 01/28/13

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised August 3, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable).

Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. **Organic Parameters:** PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. **Organic Parameters:** EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, **Organic Parameters:** EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. **Organic Parameters:** EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. **Organic Parameters:** EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B, 3020A, . **Organic Parameters:** EPA 3510C, 3630C, 3640A, 3660B, 8081B, 8082A, 8270C, 8270D, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 6020A, 7471B, 9040B, 9045C. **Organic Parameters:** SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040C, 6020A, 9050A. **Organic Parameters:** SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9045D, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)

Atmospheric Organic Parameters (EPA 3C, TO-15, TO-10A, TO-13A-SIM.)

Biological Tissue (Inorganic Parameters: SW-846 6020A. Organic Parameters: SW-846 8270C, 8270D, 3510C, 3570, 3610C, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. **NELAP Accredited**.

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, 6020A, 1631E, 7470A, 9050A, EPA 180.1, 3020A. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 3510C.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A, 7471B, 7474, 9040C, 9045D. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 1311, 3050B, 3580A, 3570, 3051A.)

Air & Emissions (EPA TO-15, TO-10A.)

Pennsylvania Certificate/Lab ID: 68-02089 **NELAP Accredited**

Non-Potable Water (Inorganic Parameters: 1312, 1631E, 180.1, 3020A, 6020A, 7470A, 9040B, 9050A, 2320B, 2540D, 2540G, SM4500H+-B. Organic Parameters: 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D .)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3051A, 6020A, 7471B, 7474 9040B, 9045C, 9060. Organic Parameters: EPA3050B, 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8270D, 8081B, 8015D, 8082A.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. **NELAP Accredited via NJ-DEP**.

Refer to NJ-DEP Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. **NELAP Accredited**.

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8081, 8082.)

Air (Organic Parameters): EPA TO-15)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. **NELAP Accredited**.

Non-Potable Water (Inorganic Parameters:EPA 3020A, 6020A, 245.7, 9040B. Organic Parameters: EPA 3510C, 3640A, 3660B, 3665A, 8270C, 8270D, 8082A, 8081B, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051, 9060. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

Washington State Department of Ecology Certificate/Lab ID: C954. **Non-Potable Water (Inorganic Parameters)**: SM2540D, 180.1, 1631E.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015, 8270.)

U.S. Army Corps of Engineers

Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH, 8082A, 8081B, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH 8082A, 8081B, 8015D-SHC, 8015D.)

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.



Alpha Analytical

320 Forbes Blvd
Mansfield, MA 02048-1806
Tel: 508-822-9300
Fax: 508-822-3288

AIR Chain-of-Custody - NJ

Serial_No:01281311:52

L1301460

Client Contact Information

Project Information

Company: Geosyntec Consultants
Address: 76 agents Drive
City/State/Zip: Ewing, NJ 08628
Phone: 609-493-0010
FAX: 609-495-1401
Email: jbdsmr@geosyntec.com

Project Name: Ingall Renel
Site/Location: Phillipsburg NJ
Project Manager: Jason Dukman
Site Contact: Jason Dukman
Phone: 609-493-0010

Analysis Turn-Around Time

Standard (Specify)

Rush (Specify) 3 day

Date Rec'd in Lab

ALPHA Job#

Carrier: Pickup

Samplers Name(s) Jason Dukman

1 of 2 COCs

Report Information - Data Deliverables:

- FAX:
 ADEX Criteria Checker:
 Email (standard pdf report)

Billing Information

 Same as Client Info PO #:

Analysis

Matrix

TO-15 + TIC

EPA 3C

Indoor / Ambient Air
Soil Gas

ALPHA LAB ID (Lab Use Only)	Sample Identification	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Outgoing Canister Pressure ("Hg) (Lab)	Incoming Canister Pressure ("Hg) (Lab)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout (ml/min)	Can Cert ID	
- 1	IA-01	1/21/13 1/23/13	0910	0910	-29.17	-9.00	67	67			0125	1519	6	3.2	L1300539-04	X
- 2	IA-02	1/21/13 1/23/13	0915	0912	-29.82	-9.00	67	67			0151	1625	6	3.1	L1300539-04	X
- 3	IA-03	1/21/13 1/23/13	0913.5	0915	-30.17	-6.66	67	67			0124	697	6	3.1	L1300539-04	X
- 4	IA-04	1/21/13 1/23/13	0912	0916	-29.76	-10.77	67	67			0445	1610	6	3.0	L1300539-04	X
- 5	IA-05	1/21/13 1/23/13	0915	0919	-28.51	-13.53	67	67			0371	785	6	3.0	L1300539-04	X
- 6	OA-01	1/21/13 1/23/13	0913	0918	-28.87	-11.45	67	67			0215	991	6	3.0	L1300539-04	X

Temperature (Fahrenheit)

Ambient

Maximum

Minimum

Start	18	21	8
Stop	13	—	DB

GC/MS Analyst Signature (TO-15)

Pressure (inches of Hg)

Ambient

Maximum

Minimum

Start	30.20	30.78	30.20
Stop	30.28	—	DB

Special Instructions/QC Requirements & Comments:

Canisters Shipped by:

Samples Relinquished by:

Relinquished by:

Date/Time:

Date/Time:

Date/Time:

Canisters Received by:

Received by:

Received by:

Date/Time:

Date/Time:

Date/Time:

1200

1900

23:00

1200

1900

23:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until all ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

1/24/13 01:15

mawfied lab

1/24/13 01:15



Alpha Analytical

320 Forbes Blvd
Mansfield, MA 02048-1806
Tel: 508-822-9300
Fax: 508-822-3288

AIR Chain-of-Custody - NJ

Serial_No:01281311:52
LIB01460

Client Contact Information			Project Information			Analysis & Matrix														
Company: Geosyntec Consultants Address: 7 Graples Drive City/State/Zip: Ewing, NJ 08628 Phone: (609) - 493-9010 FAX: (609) - 493-1401 Email: jbotman@geosyntec.com			Project Name: Ingersoll Rand Site/Location: Phillipsburg, NJ Project Manager: Jacob Botman Site Contact: Jacob Botman Phone: (609) - 493-9010			Carrier: Philip Jacob Botman Samplers Name(s): Report Information - Data Deliverables: <input type="checkbox"/> FAX: <input type="checkbox"/> ADEx <input type="checkbox"/> Criteria Checker: _____ <input checked="" type="checkbox"/> EMail (standard pdf report)														
						Billing Information <input type="checkbox"/> Same as Client Info PO #:														
Standard (Specify) Rush (Specify): 3 day																				
ALPHA LAB ID (Lab Use Only)	Sample Identification	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Outgoing Canister Pressure ("Hg) (Lab)	Incoming Canister Pressure ("Hg) (Lab)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout (ml/min)	Can Cert ID	TO-15	RT/ICs	EPA 3C	Indoor / Ambient Air	Soil Gas
-7	DUF-01	11/20/13 11/21/13	—	—	29.60	18.70	67	67			0182	1702	6	3.2	L400855-04-X	X				
			Temperature (Fahrenheit)												GC/MS Analyst Signature (TO-15)					
				Ambient	Maximum	Minimum														
			Start	18	21	8														
			Stop	13		48														
			Pressure (inches of Hg)																	
				Ambient	Maximum	Minimum														
			Start	30.20	30.28	30.20														
			Stop	30.28	—	30.28														
Special Instructions/QC Requirements & Comments:																				

Canisters Shipped by: <i>Duffy</i>	Date/Time: 1/23/13 12:00	Canisters Received by: <i>Don Biggs</i>	Date/Time: 1/23/13 12:00	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until all ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.
Samples Relinquished by: <i>Don Biggs</i>	Date/Time: 1/23/13 1900	Received by: <i>Steve Knott</i>	Date/Time: 1/23/13 1900	
Relinquished by: <i>Steve Knott</i>	Date/Time: 1/23/13 23:00	Received by: <i>J. Doff</i>	Date/Time: 1/23/13 23:00	

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until all ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.